

December 6, 2011

Evidence of ADHD's genetic origin, in some

And while Dr. Landrigan may believe that environmental "toxins" are the cause of several neurological disorders, a new study published in *Nature Genetics* supports the more likely theory that genetics play a much bigger role — specifically for patients with attention deficit hyperactivity disorder (ADHD).

Researchers from the Center for Applied Genomics at the Children's Hospital of Philadelphia conducted a whole-genome analysis on 1,000 children with ADHD and 4,100 without the disorder and found that four gene variants from a specific chromosomal locus were associated with the condition. These initial findings were evaluated in another group of nearly 2,500 ADHD patients and 9,200 control participants, and it was determined that at least 10 percent of the ADHD patients in the sample had these particular gene variants. In the population as a whole, this is potentially equivalent to half a million U.S. children.

The study results are exciting in that researchers will now be targeting that same gene group — called the "glutamate receptor pathway" — for future ADHD drug treatments. Since 5.2 million children between the ages of 3 and 17 have been diagnosed with the disorder in the U.S., this type of breakthrough could help up to 7 percent of school-age kids.

In addition to advancing ADHD therapy, ACSH's Dr. Ruth Kava says the research is also important for another reason: "Perhaps folks like Dr. Landrigan will finally stop blaming chemicals for all sorts of disorders and realize that genetic factors are the more probable causes of many of these conditions."

This information was found online at:

http://www.acsh.org/factsfears/newsID.3222/news_detail.asp